

Study Plan for B.S.E., INTERDISCIPLINARY ENGINEERING & Renewable Energy emphasis (Solar/All Track)

Student Name: _____

(2019-20 Catalog) (MTH 123 Placement - 5 Year Program)

Minor: _____

Student ID#: G

1st Year	1st Semester: Fall	Credits	Grade	Semester Completed	2nd Semester: Winter	Credits	Grade	Semester Completed	Semester: S/S	Credits	Grade	Semester Completed
	MTH 123 Trigonometry * WRT 150 Writ Strategies ! EGR 100 Intro to Engrg GE - HP GE - Arts	3 4 1 3 3	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	* MTH 201 Calculus I * CHM 115 Chemistry I * EGR 106 Intro to Egr Design I @ GE P & L PHI 102 - Ethics	4 4 3 3	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
2nd Year	3rd Semester: Fall	Credits	Grade	Semester Completed	4th Semester: Winter	Credits	Grade	Semester Completed	Semester: S/S	Credits	Grade	Semester Completed
	* MTH 202 Calculus II * EGR 107 Intro to Egr Design II ^ BIO 105 Environmental Sci. * STA 220 Statistical Modeling * EGR 220 Measure/Data Analysis	4 3 3 2 1	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	* MTH 203 Calculus III * PHY 230 Physics I ~ EGR 224 Intro Dig Sys Design * GE SBS/US (SOC 105)	4 5 3 3	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
3rd Year	5th Semester: Fall	Credits	Grade	Semester Completed	6th Semester: Winter	Credits	Grade	Semester Completed	Semester: S/S	Credits	Grade	Semester Completed
	+ * PHY 234/1 Physics II * EGR 226 MicroCtrl Pgm Appl * EGR 209 Mech & Mach * EGR 289 Engrg Co-op Prep	4/5 4 4 1	_____ _____ _____ _____	_____ _____ _____ _____	* MTH 302 Lin Alg & DEQ * EGR 223 Probability/Signals * EGR 257 Elec. Materials * EGR 214 Circuit Analysis I	4 3 4 4	_____ _____ _____ _____	_____ _____ _____ _____	EGR 290 Engrg Co-op I	3	_____ _____	_____ _____
4th Year	7th Semester: Fall	Credits	Grade	Semester Completed	Semester: Winter	Credits	Grade	Semester Completed	8th Semester: S/S	Credits	Grade	Semester Completed
	# EGR 314, 360 or 362 # EGR 326, 345 or 346 & IE Elec	4 4 3/4	_____ _____ _____	_____ _____ _____	EGR 390 Engrg Co-op II (sws)	3	_____ _____	_____ _____	~ EGR 330 or IE Elec. ~ EGR 323 or IE Elec. GE GP	3/4 3/4 3	_____ _____ _____	_____ _____ _____
5th Year	Semester: Fall	Credits	Grade	Semester Completed	9th Semester: Winter	Credits	Grade	Semester Completed	10th Semester: S/S	Credits	Grade	Semester Completed
	EGR 490 Engrg Co-op III EGR 463 Alternative Energy	3 3	_____ _____	_____ _____	EGR 485 Sr Project I ^ EGR 406 Renewable Energy EGR 413 Mats Energy Storage & IE Elec (EGR 430) ^ GEO 360 Earth Resources	1 3 3 3/4 3	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	EGR 486 Sr Project II & IE Elec. (EGR 455) % ECO 210/211 Micro/Macroecon	2 3/4 3	_____ _____ _____	_____ _____ _____

PCEC Student Services 616-331-6025

- * Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- Consider taking a course that doubles as SBS and US (See Gen Ed guide for selections)
- @ An ethics course is required in the engineering program (PHI 102 or another ethics course in General Education).
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS GenEd requirement.
- # Select one for required IE coursework (EGR 314 and EGR 326 recommended)
- & A total of four electives is required. Please see a faculty advisor ASAP to select electives.
- ^ Emphasis required general education course. Check availability ASAP for planning purposes.
- ! Not required, but highly recommended for success.
- ~ IE Prerequisite course for selected upper-level electives

Secondary Admission Criteria:

- GPA of 2.7 or above in the Engineering Foundation courses
- Completion of each course in the Engineering Foundation with a grade of C (2.0) or above, with no more than one repeat per Foundations course
- Completion of preparation for placement in the cooperative engineering education course, EGR 289

Recommendation:

It is strongly encouraged that students do not begin or break a curriculum thread by taking courses at other institutions; e.g., take the MTH 201 equivalent elsewhere, return to GV and continue in the math thread with MTH 202

Electives	Credits	Title	Semester	Course Prerequisites	Energy Focus
EGR 314	4	Circuit Analysis II	Fall	Only if not taken for required course, no double dipping	Solar
EGR 315	4	Electronic Circuits I	Fall		Solar
EGR 326	4	Embedded System Design	Fall		Solar
EGR 430	4	Electromechanics	Winter	EGR 330	All
EGR 455	4	Automatic Control	Summer	EGR 323	All
EGR 435	3	Math Model of Phys Sys	Winter	MTH 302	All